

## REMARKS

This responds to the Office Action dated May 10, 2007 (hereinafter "Office Action"). Claims 1, 10, 13, 18, 21, 26 and 30 are currently amended and fully supported by the application as filed. No claims have been canceled or added. Accordingly, claims 1-32 are currently pending in this patent application.

Applicants hereby respectfully request further examination and reconsideration of this application in view of the foregoing claim amendments and following remarks.

### *Objection to the Drawings*

1. The drawings were objected to under 37 CFR 1.84(p)(5). In accordance with the textual portions of the application as filed, such as at page 9, Applicants have amended FIG. 4 to include the reference numeral "400" to refer generally to the panel assembly shown therein.

Reconsideration and withdrawal of this basis of objection is respectfully requested.

### *Objection to the Specification*

2. The specification was objected due to an informality. Applicants have amended the textual portions of the application as filed to correct the reference number associated with "deformable seat" to read "904".

Reconsideration and withdrawal of this basis of objection is respectfully requested.

### *§112 Rejection of the Claims*

3. Claim 13 was rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. Applicants have amended claim 13 to recite "wherein the second veneer is slidably disposed against the insulation core, such that the second veneer, fiberboard substrate and first veneer are moveable relative to the insulation core," and thereby overcome this basis of rejection. Support for such amendment to claim 13 can be found at least at pages 9 and 16 and at FIGS. 3 and 9 of the application as filed.

Reconsideration and withdrawal of this basis of rejection is respectfully requested.

§103 Rejection of the Claims

4. Claims 1-9, 18-21 and 23-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hollman (US 6,487,827) (hereinafter “Hollman”) in view of Aufderhaar (US 5,219,634) (hereinafter “Aufderhaar”) and Eggers et al. (US 4,146,662) (hereinafter “Eggers”). Applicants respectfully request reversal of this rejection on the ground that there is no *prima facie* case of obviousness.

*Claim 1:*

Claim 1 recites a panel comprising, among other things, “a fiberboard substrate including wood fiber and a waterproof resin” and “a waterproof adhesive disposed between [ ] at least one veneer and the fiberboard substrate providing a direct coupling therebetween.” The Office Action expressly admits that Hollman fails to recite such elements, but asserts that modifying the panel of Hollman as taught by Aufderhaar and Eggers would have been obvious to one skilled in the art. (Office Action at 4.) More specifically, the Office Action attempts to rely on Aufderhaar to establish a fiberboard substrate including a waterproof resin in addition to wood fiber. (*Id.*) The Office Action further attempts to rely on Eggers to establish the use of a waterproof adhesive to bond a veneer to the fiberboard substrate. (*Id.*)

The proposed combination of Hollman, Aufderhaar, and Eggers is improper and fails to establish all elements recited in the Applicants’ claim 1. As one example, Aufderhaar teaches away<sup>1</sup> from being combined with Hollman to produce the claimed combination. For instance, Aufderhaar recites:

The instant invention [including a wood fiber or wood chip compressed panel into which plastic resin has been introduced] . . . provid[es] a door core or panel that can have an integral design and need little or no extra finishing work performed upon it before shipment.

(Aufderhaar at col. 3, lns. 24-28; *see also* col. 2, lns. 51-54.) In contrast to a panel construction requiring little to no extra finishing work before shipment, as recited in Aufderhaar, Hollman recites a panel construction requiring edge banding on all exposed outer edges of a finished panel. For instance, Hollman recites:

<sup>1</sup> According to the Federal Circuit, a reference should be considered as a whole, and portions arguing against or teaching away from the claimed invention must be considered. (*See Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 230 USPQ 416 (Fed. Cir. 1986).)

The edge banding 34, as shown in FIG. 3c, is preferably located on all the exposed outer edges of the finished door 26 . . . [s]everal advantages are incurred using edge banding 34. The strength and stability of the door 26 is substantially increased over that of prior art doors because all of the edges of the door 26, including joint seams 25, are supported with the edge banding 34.

(Hollman at col. 4, lns. 50-61; FIG. 3c.) Applicants submit that using the cited references alone, one of ordinary skill in the art would not have been motivated to combine the panel construction requiring edge banding on all exposed outer edges of a finished panel recited in Hollman with the panel construction of Aufderhaar requiring little to no extra finishing work.

As another example, the proposed combination of Hollman and Eggers fails to establish “a waterproof adhesive disposed between [ ] at least one veneer and the fiberboard substrate providing a direct coupling therebetween,” as recited in claim 1. The Office Action admits that Hollman does not recite using a waterproof adhesive to provide a direct coupling between at least one veneer and a fiberboard substrate. (*See* Office Action at 4.) Instead, the Office Action attempts to rely on Eggers to establish this missing direct coupling arrangement provided by a waterproof adhesive. However, Eggers actually recites a hardwood veneer encapsulated by overlay paper, the latter of which is adhesively bonded to a solid core material (i.e., the asserted fiberboard substrate). For instance, Eggers recites:

The hardwood veneer with the overlay bonded to both the face and back surfaces is then adhesively bonded with a phenolic adhesive or other suitable waterproof adhesive to the solid core material 10.

(Eggers at col. 2, lns. 49-52; FIG. 2.) In other words, the hardwood veneer is precluded from directly coupling with the fiberboard substrate due to the intermediately-positioned overlay paper.

Moreover, Applicants submit that using the cited references alone, one of ordinary skill in the art would not have been motivated to combine a panel comprising a fiberboard substrate including wood fiber and waterproof resin, as assertedly provided by Hollman and Aufderhaar (Office Action at 4), with the overlay panel construction of Eggers. For instance, as recognized by the Office Action, Aufderhaar recites:

[A] wood fiber or wood chip compressed panel into which plastic resin has been introduced through the surface of the wood fiber board so the resin at least encapsulates the wood material of the board located on the surface of the board and, preferably, at least

a slight depth below the surface of the wood board . . . whereby an essentially moisture impervious panel having good strength characteristics is produced.

(Aufderhaar at col. 2, lns. 51-61.) Similarly, Eggers recites:

[W]ith phenolic resin-impregnated overlay sheets bonded to the core material gives a finished door with excellent warp resistance . . . Additionally, the resin impregnated overlayed surface provides checking and crazing resistance no matter what the weather conditions.

(Eggers at col. 2, lns. 55-63.) According to the Federal Circuit, motivation to combine requires desirability, not merely a trade-off. *Winner International Royalty Corp. v. Wang*, 202 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir.), cert. denied, 530 US 1238 (2000). Because Hollman and Aufderhaar, alone, assertedly provide a panel providing moisture resistance, one of ordinary skill in the art would have had no motivate to further look to the overlay moisture resistant panel construction of Eggers.

Further yet, Eggers teaches away<sup>2</sup> from being combined with Aufderhaar to produce the claimed invention. For instance, Eggers recites:

The core material of the door is preferable a solid particleboard core material with a minimum 28 lb/ft<sup>3</sup> density.

(Eggers at col. 2, lns. 9-11.) In contrast, Aufderhaar recites:

The instant invention relates to a compression molded panel and specifically to the treatment of a compression molded panel to yield a water proof, single piece, structurally strong storm door core or panel that has the strength and feel of solid wood but is instead made from a wood fiber or wood chip board, preferably of a low initial density.

The invention is a method for producing a unique panel or door core 10 composed of, preferably, 33 percent ployester [sic] resin and 67 percent wood fiber. The starting material is normally a compressible wood fiber board 20 having a density of approximately 16 to 18 pounds per cubic foot.

(Aufderhaar at col. 1, lns. 6-12; col. 4, lns. 62-67.) Applicants submit that the higher density core material required by Eggers would not allow for the influx of polyester resin to create the 33 percent resin panel as recited by Aufderhaar. Because Eggers teaches away from being combined with Aufderhaar, one of ordinary skill in the art would not have been motivated to combine the panel constructions as recited in each of such references, to produce the claimed invention without Applicants' application disclosure.

<sup>2</sup> See note 1, supra.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claim 1. Claims 2-9 are dependent on claim 1 and are patentable over Hollman in view of Aufderhaar and Eggers for the reasons stated above, in addition to the elements in such claims.

*Claims 5-9:*

Additionally, regarding claims 5-9, the Office Action admits that Hollman as modified by Aufderhaar and Eggers fail to recite an adhesive that contains the specific compounds of phenol formaldehyde, methyl di-isocyanate, cyanuramide, polyurethane, or urethane, as claimed by Applicants, but asserts that using such an adhesive would have been “a matter of obvious design choice.” (Office Action at 5.) According to the Federal Circuit, the assertion that a modification proposed is “an obvious matter of design choice” is an unsupported conclusion – not a reason upon which to base a rejection. *See In re Garrett*, 33 BNA PTCJ 42 (November 13, 1986); *see also In re Gal*, 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992).

For at least this reason, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claims 5-9.

*Claims 18-21 and 23-25:*

The proposed combination of Hollman, Aufderhaar, and Eggers is improper and fails to establish all elements recited in the Applicants’ claim 18. Claim 18 recites a method of making a panel comprising, among other things, “compressing a fiberboard substrate including wood fiber and a waterproof resin,” “applying a waterproof adhesive to at least one surface of a first veneer,” and “coupling the at least one surface of the first veneer to [ ] at least one face of the fiberboard substrate using the waterproof adhesive applied to the first veneer.” The Office Action expressly admits that Hollman fails to recite such elements, but asserts that modifying the panel of Hollman as taught by Aufderhaar and Eggers would have been obvious to one skilled in the art. (Office Action at 4.) To this end, Applicants hereby incorporate by reference the relevant remarks asserted above in association with claim 1 (e.g., Aufderhaar teaches away from being combined with Hollman to produce the claimed combination; the proposed combination of Hollman and Eggers fails to establish “coupling the at least one surface of the first veneer to [ ] at least one face of the fiberboard substrate using the waterproof adhesive applied to the first

veneer”; one of ordinary skill in the art would not have been motivated to combine a moisture resistant panel comprising a fiberboard substrate including wood fiber and waterproof resin, as assertedly provided by Hollman and Aufderhaar, with the overlay moisture resistant panel construction of Eggers; and Eggers teaches away from being combined with Aufderhaar to produce the claimed invention).

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claim 18. Claims 19-25 are dependent on claim 18 and are patentable over Hollman in view of Aufderhaar and Eggers for the reasons stated above, in addition to the elements in such claims.

5. Claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hollman, Aufderhaar, and Eggers as applied to claim 1 above, and further in view of Forman (US 5,526,857) (hereinafter “Forman”).

Claim 22 recites a method of making a panel comprising, among other things, “milling the at least one face of the fiberboard substrate to provide at least one profiled face.” The Office Action inherently admits that Hollman, Aufderhaar, and Eggers fail to recite such elements, but asserts that combining these references with Forman would be obvious. (Office Action at 5.)

The proposed combination of Hollman, Aufderhaar, Eggers, and Forman is improper and fails to establish all elements recited in the Applicants’ claim 22. As one example, Holland teaches away from being combined with Forman to produce the claimed combination. For instance, Holland recites:

With the invention of the vacuum press, however, the industry has moved to manufacturing raised panel doors 10 in which the center panel 16 is made of a veneered panel. Such technology has enabled manufacturers to press and bend veneer over the gently sloping surface of a core material.

(Holland at col. 1, lns. 39-45.) Applicants submit that using the cited references alone, one of ordinary skill in the art would not have been motivated to combine the cost effective vacuum pressing of raised panel doors recited in Hollman with the extra manufacturing step of milling panels as recited in Forman.

For at least this reason, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claim 22.

6. Claims 10, 13-15 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huizenga (US 2,633,946) (hereinafter “Huizenga”) in view of Hollman, Aufderhaar, and Eggers.

The proposed combination of Huizenga, Hollman, Aufderhaar, and Eggers is improper and fails to establish all elements recited in the Applicants’ claim 10. Claim 10 recites a door assembly comprising, among other things, “a fiberboard substrate including wood fiber and a waterproof resin,” “a first veneer coupled directly to [ ] at least one profiled face with a waterproof adhesive” and “a second veneer, wherein the second veneer is directly coupled to another face of the fiberboard substrate with the waterproof adhesive.” The Office Action expressly admits that Huizenga and Hollman fail to recite such elements, but asserts that modifying the panel of Hollman as taught by Aufderhaar and Eggers would have been obvious to one skilled in the art. (Office Action at 8.) To this end, Applicants hereby incorporate by reference the relevant remarks asserted above in association with claim 1 (e.g., Aufderhaar teaches away from being combined with Hollman to produce the claimed combination; the proposed combination of Hollman and Eggers fails to establish “a first veneer coupled directly to [ ] at least one profiled face with a waterproof adhesive”; one of ordinary skill in the art would not have been motivated to combine a moisture resistant panel comprising a fiberboard substrate including wood fiber and waterproof resin, as assertedly provided by Hollman and Aufderhaar, with the overlay moisture resistant panel construction of Eggers; and Eggers teaches away from being combined with Aufderhaar to produce the claimed invention).

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claim 10. Claims 11-17 are dependent on claim 10 and are patentable over Huizenga in view of Hollman, Aufderhaar, and Eggers for the reasons stated above, in addition to the elements in such claims.

*Claim 13:*

Additionally, regarding claim 13, Applicants cannot find in Huizenga as modified by Hollman, Aufderhaar, and Eggers any recitation of a door assembly “wherein the second veneer is slidably disposed against the insulation core, such that the second veneer, fiberboard substrate and first veneer are moveable relative to the insulation core,” as recited in such claim.

For at least this reason, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claim 13.

7. Claims 11, 12 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huizenga, Hollman, Aufderhaar, and Eggers as applied to claim 10 above, and further in view of Twigg et al.(US 6,151,849) (hereinafter “Twigg”).

Claim 11 recites a door assembly comprising, among other things, “a glazing cap coupled to the door and engaged against the at least one panel,” and claim 12 recites a door assembly comprising “a sealant is disposed between the at least one panel and the glazing cap.” The Office Action expressly admits that Huizenga, Hollman, Aufderhaar, and Eggers fail to recite such elements, but asserts that combining these references with Twigg “would have been obvious to one skilled in the art.” (Office Action at 9-10.) According to the US Supreme Court, “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR International Co. v. Teleflex Inc.*, 550 U. S. \_\_\_\_ (2007). Because the Office Action simply cited different features of the claimed invention from different references without explaining the motivation to combine or modify the references, such combination of references is improper and legally insufficient.

For at least this reason, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claims 11-12.

8. Claim 26 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Huizenga in view of Hollman, Aufderhaar, and Eggers.

The proposed combination of Huizenga, Hollman, Aufderhaar, and Eggers is improper and fails to establish all elements recited in the Applicants’ claim 26. Claim 26 recites a method of making a door assembly comprising, among other things, “disposing a first panel within the at least one panel cavity, wherein the first panel includes a fiberboard substrate of wood fiber and a waterproof resin and a veneer directly coupled to the fiberboard substrate with a waterproof adhesive.” The Office Action expressly admits that Huizenga and Hollman fail to recite such elements, but asserts that modifying the panel of Hollman as taught by Aufderhaar and Eggers would have been obvious to one skilled in the art. (Office Action at 11.) To this

end, Applicants hereby incorporate by reference the relevant remarks asserted above in association with claim 1 (e.g., Aufderhaar teaches away from being combined with Hollman to produce the claimed combination; the proposed combination of Hollman and Eggers fails to establish “disposing a first panel within the at least one panel cavity, wherein the first panel includes a fiberboard substrate of wood fiber and a waterproof resin and a veneer directly coupled to the fiberboard substrate with a waterproof adhesive”; one of ordinary skill in the art would not have been motivated to combine a moisture resistant panel comprising a fiberboard substrate including wood fiber and waterproof resin, as assertedly provided by Hollman and Aufderhaar, with the overlay moisture resistant panel construction of Eggers; and Eggers teaches away from being combined with Aufderhaar to produce the claimed invention).

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claim 26. Claims 27-32 are dependent on claim 26 and are patentable over Huizenga in view of Hollman, Aufderhaar, and Eggers for the reasons stated above, in addition to the elements in such claims.

9. Claims 27-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Huizenga in view of Hollman, Aufderhaar, Eggers, and Twigg.

Claim 27 recites a method of making a door assembly comprising, among other things, “coupling a glazing cap to the door and engaging the glazing cap against the veneer of [a] first panel,” and claim 28 recites a method of making a door assembly comprising “interposing a sealant between the glazing cap and the veneer of the first panel.” The Office Action expressly admits that Huizenga, Hollman, Aufderhaar, and Eggers fail to recite such elements, but asserts that combining these references with Twigg “would have been obvious to one skilled in the art.” (Office Action at 11.) According to the US Supreme Court, “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR International Co. v. Teleflex Inc.*, 550 U. S. \_\_\_\_ (2007). Because the Office Action simply cited different features of the claimed invention from different references without explaining the motivation to combine or modify the references, such combination of references is improper and legally insufficient.

For at least this reason, Applicants respectfully request reconsideration and withdrawal of this basis of rejection of claims 27-28.

**RESERVATION OF RIGHTS**

In the interest of clarity and brevity, Applicants may not have addressed every assertion made in the Office Action. Applicants' silence regarding any such assertion does not constitute any admission or acquiescence. Applicants reserve all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicants do not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicants timely object to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicants reserve all rights to pursue any canceled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

### CONCLUSION

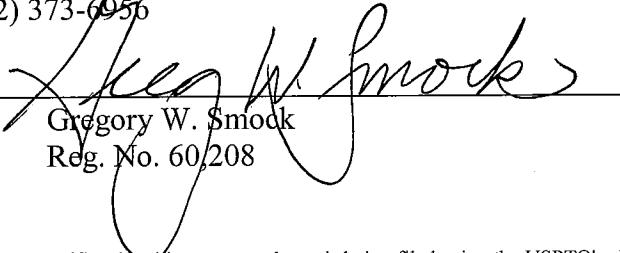
Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited and encouraged to telephone Applicants' attorney at (612) 373-6956 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date SEPT. 10, 2007

By 

Gregory W. Smock  
Reg. No. 60,208

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 10 day of September 2007.

CANDIS BUENDING

Name

Signature



TITLE: EXTERIOR WOOD COMPOSITE RAISED PANEL  
INVENTORS NAME: Brenda J. Brunk et al.  
DOCKET NO.: 1261.031US1

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ANNOTATED SHEET  
NO CHANGES

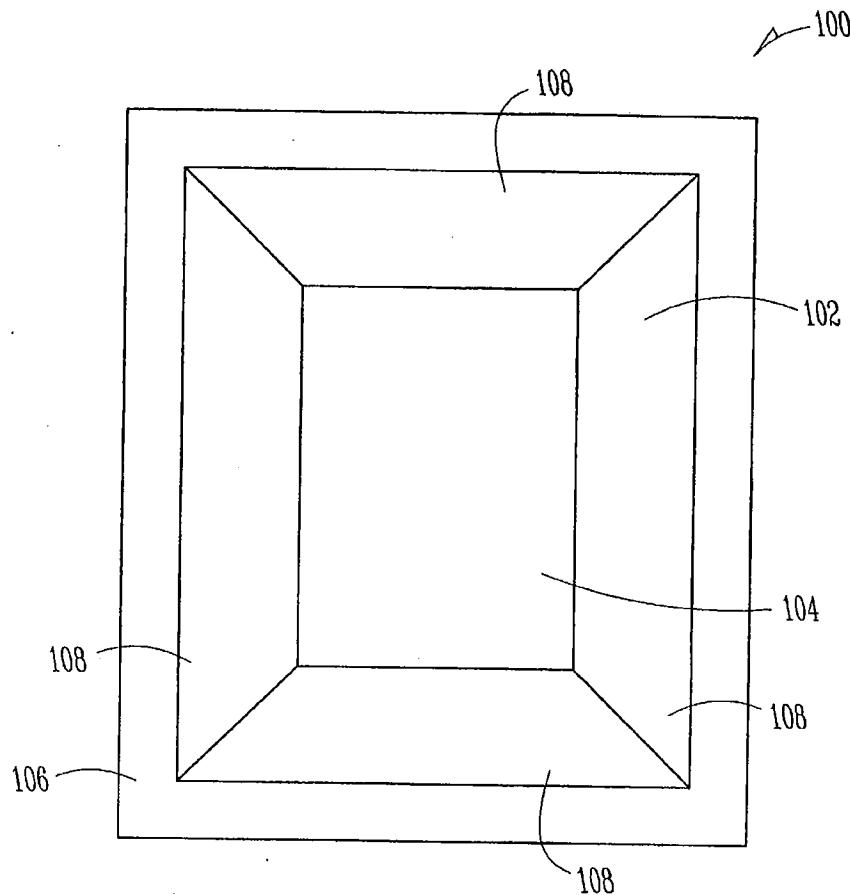
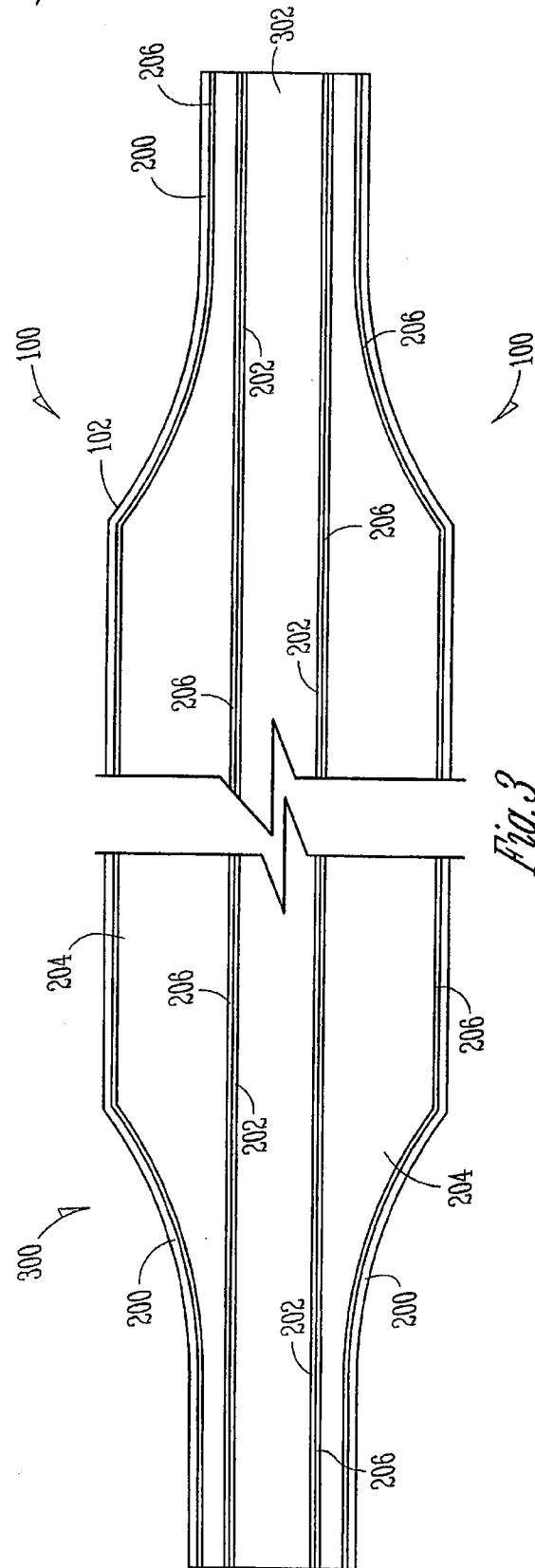
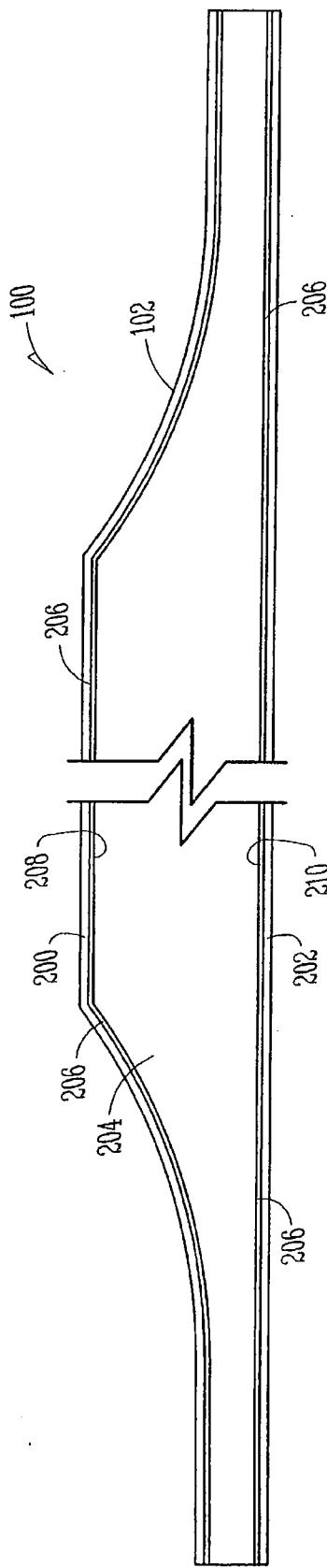


Fig. 1

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TITLE: EXTERIOR WOOD COMPOSITE RAISED PANEL  
INVENTORS NAME: Brenda J. Brunk et al.  
DOCKET NO.: 1261.031US1

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# ANNOTATED SHEET

TITLE: EXTERIOR WOOD COMPOSITE RAISED PANEL  
INVENTORS NAME: Brenda J. Brunk et al.  
DOCKET NO.: 1261.031US1

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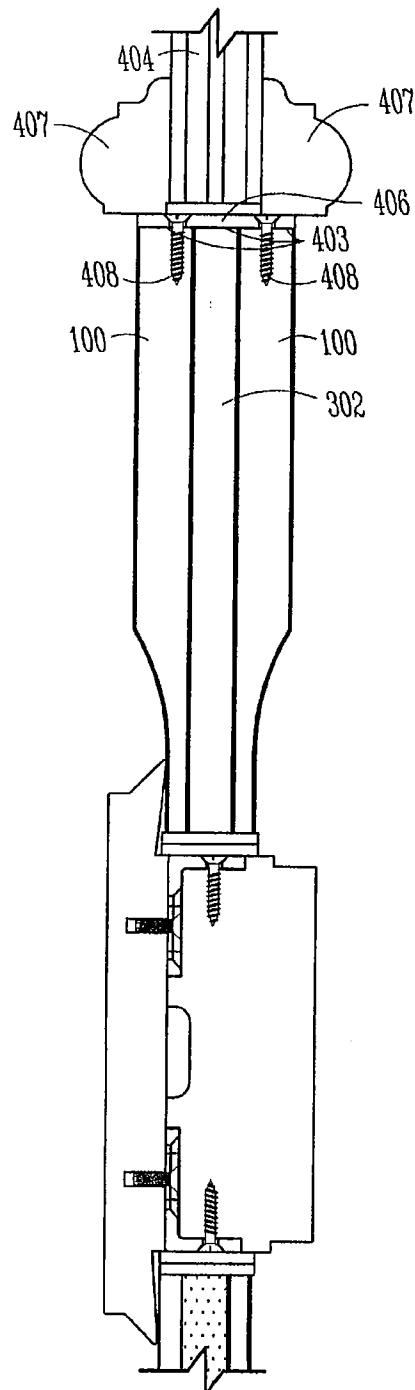


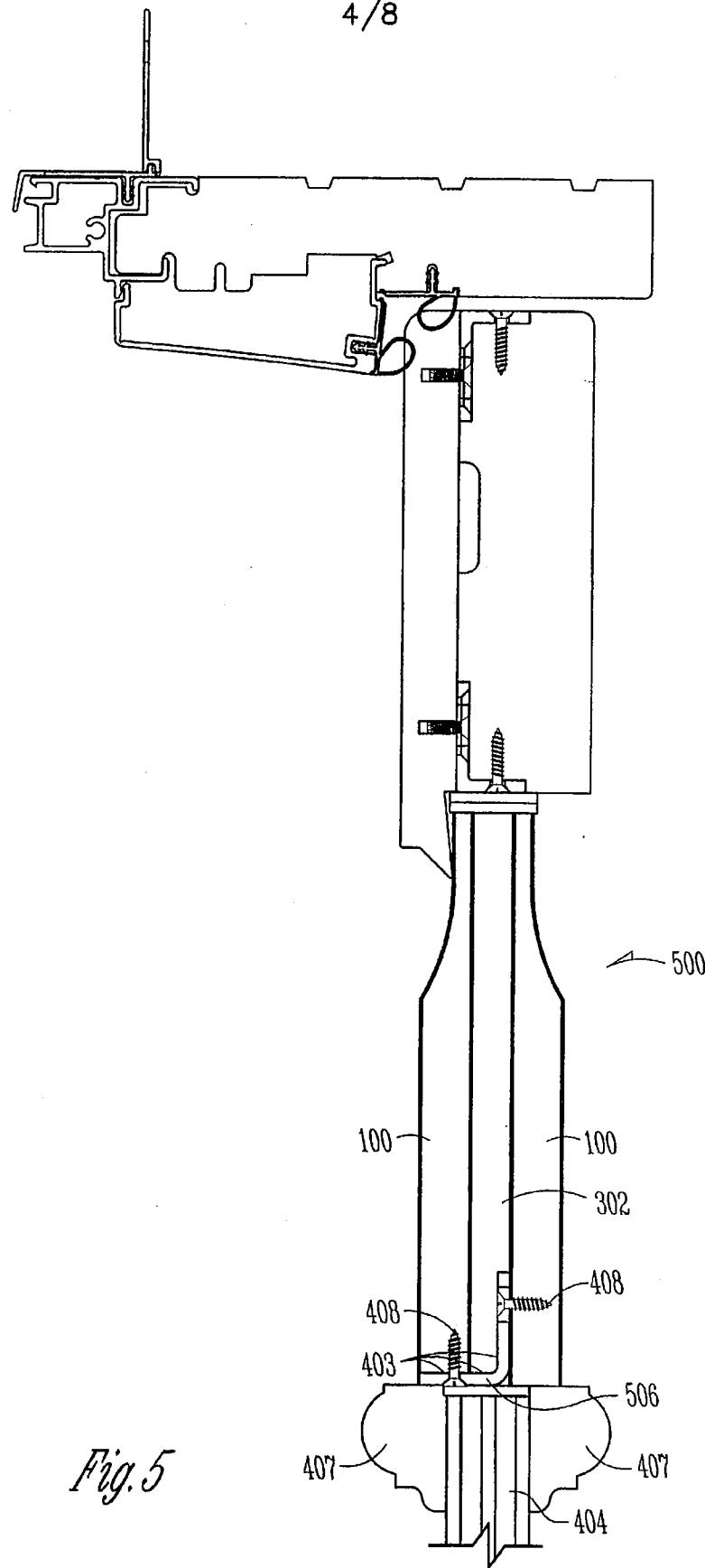
Fig. 4

ANNOTATED SHEET

No changes

TITLE: EXTERIOR WOOD COMPOSITE RAISED PANEL  
INVENTORS NAME: Brenda J. Brunk et al.  
DOCKET NO.: 1261.031US1

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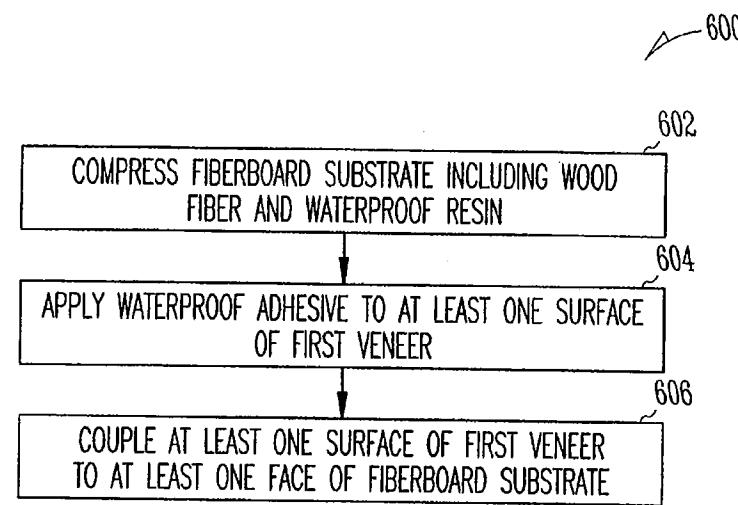


*Fig. 5*

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*Fig. 6*

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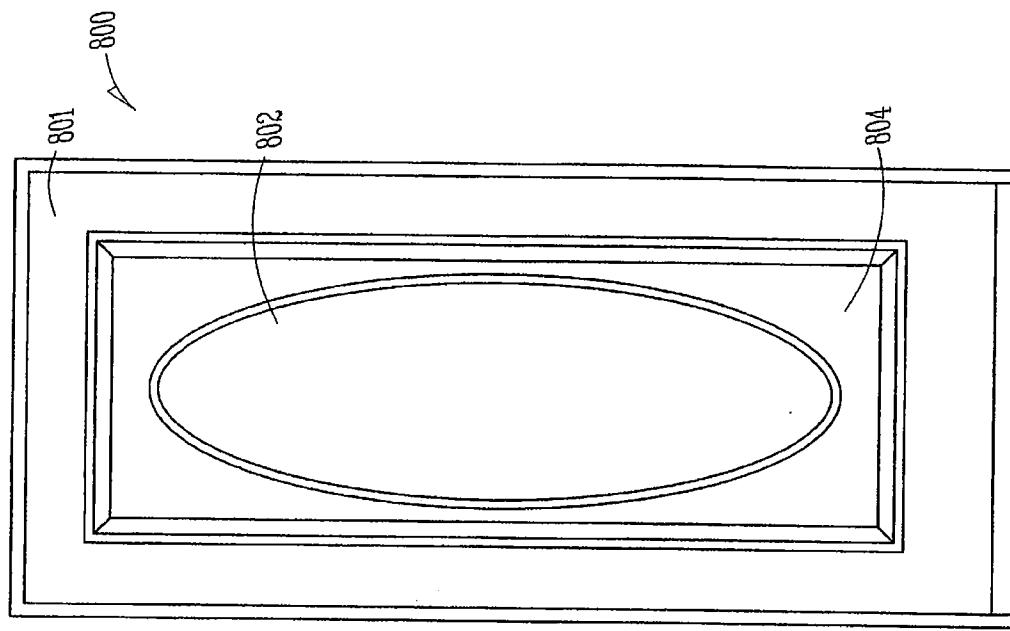


Fig. 8

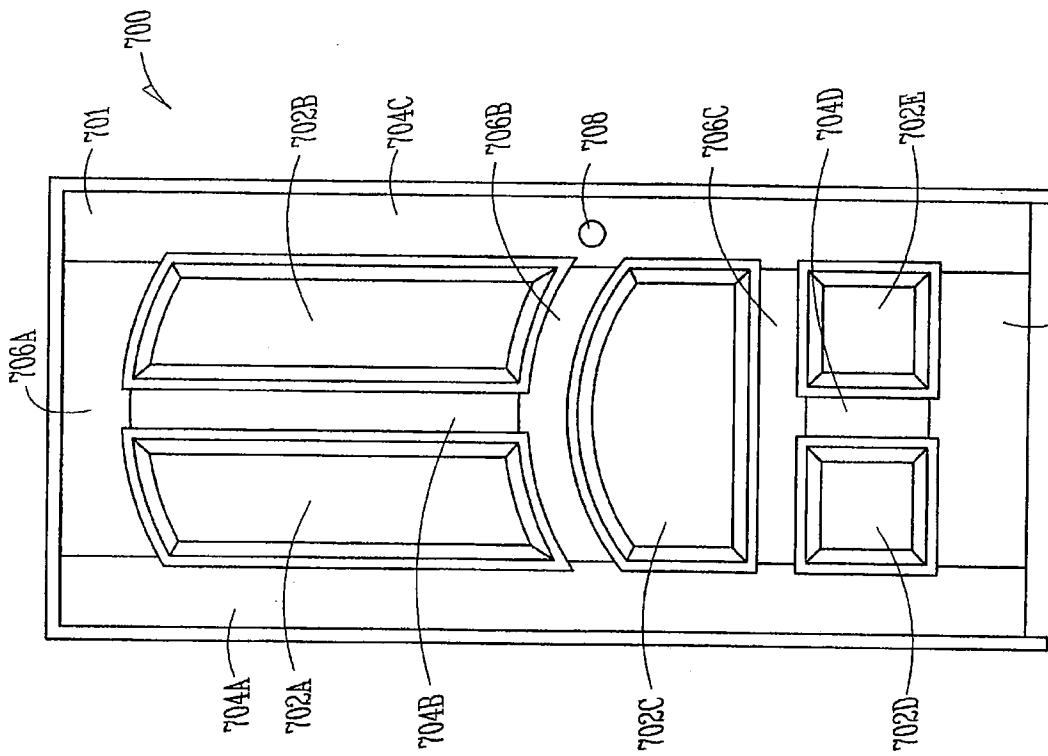


Fig. 7

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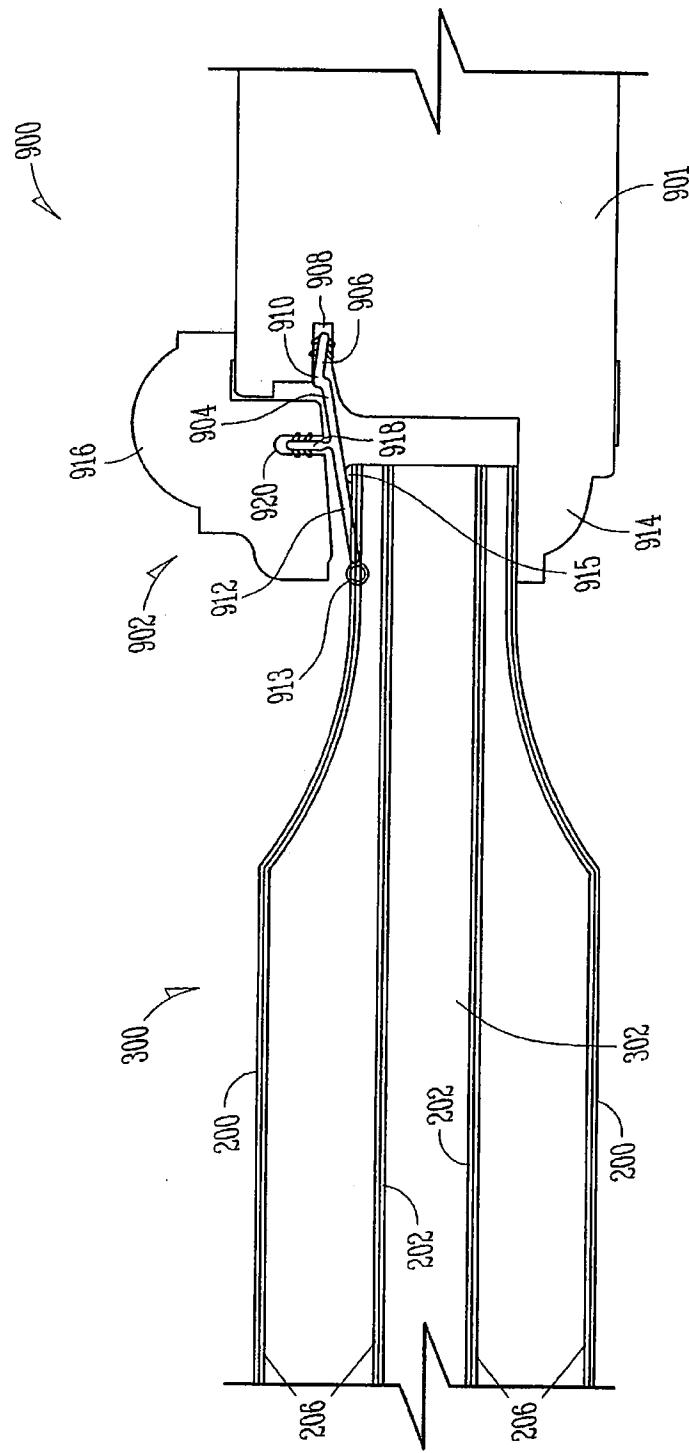


Fig. 9

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DOCKET NO.: 1261.031US1

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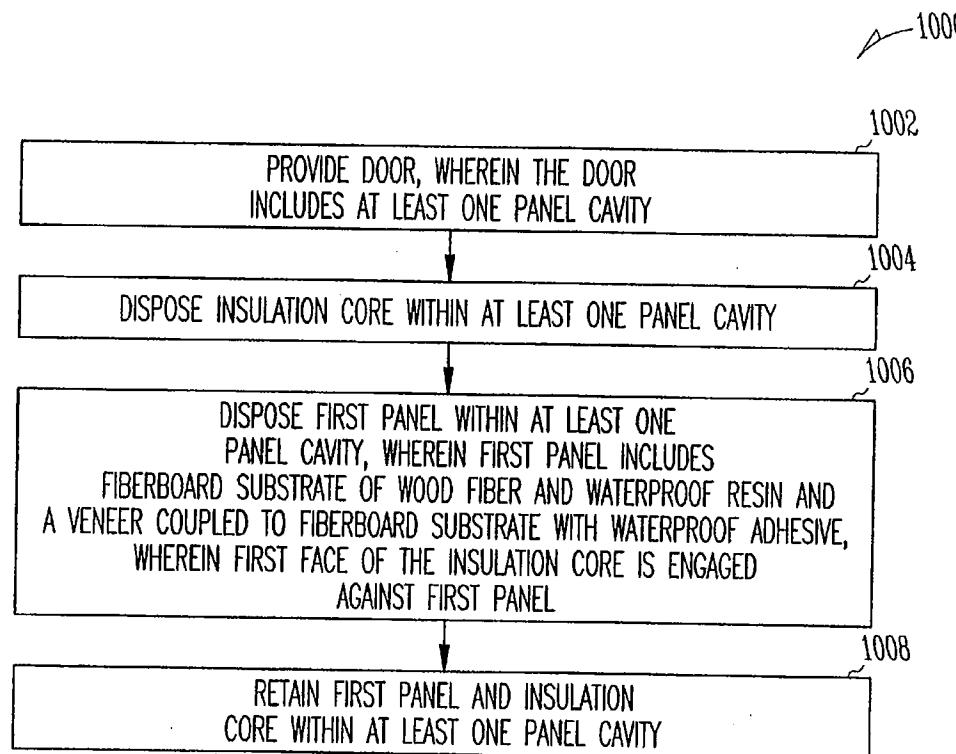


Fig. 10